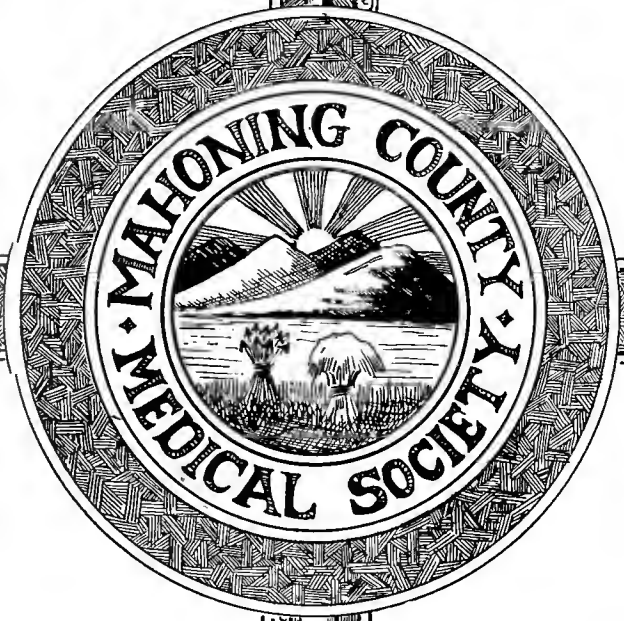

BULLETIN

of the
MAHONING
COUNTY
MEDICAL
SOCIETY

August • 1958
Vol. XXVIII • No. 8
Youngstown • Ohio

OFFICERS AND COUNCIL

OFFICERS

A. A. DETESCO, Pres. 2921 Glenwood Avenue
M. W. NEIDUS, Pres-Elect 318 Fifth Avenue
A. K. PHILLIPS, Secy. 1005 Belmont Avenue
F. G. SCHLECHT, Treas. 2218 Market Street
M. S. ROSENBLUM, Editor Home Savings and Loan Building
H. C. REMPES, JR., Exec. Secy. 125 W. Commerce Street

Censors	Delegates	Alternate Delegates
I. C. SMITH (1958)	A. RANDELL (1958)	C. C. WALES (1958)
G. E. DECICCO (1959)	P. J. MAHAR (1959)	J. J. McDONOUGH (1958)
S. W. ONDASH (1960)	H. P. McGREGOR (1960)	C. E. PICHETTE (1958)
	C. W. STERTZBACH (1961)	F. A. RESCH (1958)

Representative to the Associated Hospital Service
J. M. RANZ

TABLE OF CONTENTS

Vol. XXVIII—No. 8 **August, 1958**

ADVERTISERS' LIST

Our President Speaks

The admonitions of "physician heal thyself" and "the physician who treats himself has a fool for a patient" should be considered by all doctors. The morbidity and mortality among physicians is of great concern. The findings and warnings resulting from the physical examinations done at the American Medical Association National Convention bears analysis here.

It is strange that physicians have a poorer health record than the general population. Many studies substantiate this by showing that the interval of time between a specific symptom complex presenting itself and examination is longer among physicians than among the laity. The doctor may be preoccupied by his daily concern about his patients but he often delays because he had the misconception that "it can't happen to me." The ability to diagnose diseases should be self applied so that we physicians could properly interpret our symptoms and signs and call them to the attention of our colleagues promptly.

Physicians are reluctant to inconvenience other doctors. It has been shown that all physicians are very anxious to administer to the needs of their colleagues and their families—most physicians feel flattered and honored to do so.

It behooves all of us to be realistic toward our health problems. We should subject ourselves to yearly complete examinations and more often when indicated. We should cooperate with our personal physician with the same sincerity and purpose as we expect from our patients.

If you haven't been checked lately—do it now—stay healthy to be able to make others healthier.

Andrew A. Detesco, M.D.
President

BULLETIN of the Mahoning County Medical Society

Published Monthly in Youngstown, Ohio Annual Subscription $2.00

Volume 28 **August, 1958** **Number 8**

Published for and by the Members of the Mahoning County Medical Society

Editor

Morris S. Rosenblum, M.D.

Associate Editors

Wayne Agey, M.D.	Sidney Franklin, M.D.	Arthur E. Rappoport, M.D.
Hugh Bennett, M.D.	Lester Gregg, M.D.	James L. Smeltzer, M.D.
Leonard Caccamo, M.D.	Carl A. Gustafson, M.D.	James R. Sofranec, M.D.
James L. Fisher, M.D.	Robert L. Jenkins, M.D.	Samuel Zlotnick, M.D.
Robert Fisher, M.D.	Richard Murray, M.D.	Samuel Zoss, M.D.

EDITORIAL

The A. M. A. Journal of July 12, 1958 is the 75th Anniversary Issue. In it one finds articles by outstanding men of our country and it is a fine correlation between the past, present and future. I especially recommend reading the article by Charles F. Kettering, inventor, research consultant and Director of General Motors Corporation. He thinks that the future lies in the prevention of the feebleness, discouragement and mentally dim old age. He advocates research by physicians, organic chemists and nutritionists to develop the largely unused weapons of synthetic vitamins and hormones to supplement our world's inadequate diet.

The above anniversary issue caused me to investigate the history of our Bulletin. It is not as large or influential as the A.M.A. Journal but is does serve as a link between the Mahoning County Medical Society and its members.

The Mahoning County Medical Society was organized November 13, 1872. Although various Newsletters were printed, the first issue of the Bulletin was published in January, 1922. Dr. A. W. Thomas was the secretary and presumably the editor. We do not have any copies at our society office of any Bulletins from 1922 but we have the issues published from January, 1923 to December, 1923. The Bulletin Committee in 1923 was composed of Dr. A. W. Thomas and Dr. W. H. Bunn, Sr.

The Bulletin was then discontinued and the publication was resumed January, 1931 under the leadership of Dr. James L. Fisher as Editor. We often hear comments of what our Bulletin should contain. Some members would like less scientific papers, some would like to have merely social news, etc. Through the years since the revitalization of the Bulletin in 1931, Editors have expressed their sentiments in various ways. I could choose no better words to express my thoughts of what the Bulletin should be, than that contained in the Editorial of January, 1931 by Dr. J. L. Fisher. He was the Editor of the revitalized Bulletin as we know it today:

"This is your journal. Your ideas and suggestions as to its form and contents will gladly be received. It hopes to reflect your progressive spirit as shown by your professional activities and ideals. It is supported solely

by the income from the advertising in its pages, no remuneration is paid to anyone on its staff, and it is intended to be not only a chronicle of past and future events, but also a medium of exchange of ideas among the membership to the end that it will stimulate an even greater interest in Society affairs and aid in the crystallization of opinion on various matters which affect the profession.

"The united sentiment of a strong organization containing the best minds of the medical fraternity of this County, expressed through such a medium, should have a great deal of weight and should command the respectful attention of everyone on matters of public health or other issues on which the profession is entitled to speak with authority."

Times change but values remain constant.

Morris S. Rosenblum, M.D.

HAPPY BIRTHDAY!!!

August 17
S. W. Ondash

August 18
F. Gelbman

August 19
W. T. Breesmen
J. Campolito
S. Keyes
J. R. LaManna

August 20
O. M. Lawton

August 25
A. W. Miglets
J. C. Vance

August 26
C. K. Walter

August 29
J. M. Basile

August 30
D. R. Dockry

August 31
L. J. Gasser

September 2
E. H. Nagel

September 3
D. E. Beynon

September 4
M. Krupko

September 5
W. H. Bennett
F. G. Schlecht

September 6
H. Holden
E. H. Jones, Jr.

September 9
C. E. Pichette

September 10
L. G. Coe
A. K. Phillips

September 11
L. W. Weller

September 14
M. B. Goldstein

SOCIAL NEWS

Youngstown Hospital

Dr. L. H. Getty, one of our favorite "Old Pro's," suffered a coronary thrombosis on July 14th and is in the South Side hospital now recuperating. By this time he should be allowed visitors. Stick your head in the door and say hello, or drop him a card. Dr. J. Clair Vance is at Mayo Clinic undergoing more diagnostic studies. We wish him lots of good luck because he certainly has had his share of trouble. Dr. Whittaker, well known to us all, has gone out to Poland to take care of "Uncle Clair's" practice.

Dr. Bob Wiltsie and family have moved into a new home in Kingston Estates off Meridian Road. Family must be getting too big. Dr. D. R. Brody moved into a new home at 713 Mansell Drive.

The Dr. John Guju's have recently returned from a week in Niagara Falls, N.Y. The Dr. J. J. Campolito's left July 15th for Washington, D.C. and points south. The R. R. Fisher's spent a week in Washington baking in the sun, and a week at Lake Erie wondering where the sun went.

R. R. Fisher, M.D.

THE COUNCILOR'S PAGE—THE FORWARD LOOK

The biennial Fall Sixth Councilor District Legislative Conference will be held at the Alliance Country Club on Wednesday evening, September 17. There will be a complimentary dinner at 6:30 p.m., D.S.T. The business session will follow. The president, secretary, and chairman of the Legislative Committee of each county medical society are invited. I am sure you realize the importance of this meeting. It is a vital cog in our legislative machinery. Please do everything you can to insure 100% attendance from your county. If any of the candidates from your county have not been interviewed, please do so immediately!

The regular fall meeting of the Council will be held at the Granville Inn, Granville, Ohio, on Friday night, September 12, and Saturday and Sunday, September 13, and 14. If you have problems that you want the Council to consider, please submit them as soon as possible so we can get them on the agenda.

Your Postgraduate Committees met at Congress Lake on June 1. Summit County has the program well in hand and this promises to be another excellent Postgraduate Assembly. Save the day—Wednesday, October 22—Mayflower Hotel—Akron, and plan to attend. Because I don't do much in planning these meetings, I think I have a right to brag about them. These meetings are being recognized as among the best in the country. It wouldn't take much urging on your part to make me say that they are the *BEST* one-day meetings in the country. As of June 1, fifteen full professors and chairmen of Departments have promised to be with us. We are in correspondence with six more we hope can come. So you see we will have the usually good faculty. There will be sections in pediatrics, medicine, surgery, obstetrics and gynecology.

There will be panels all day long in the ballroom. Other section meetings will be going on in the parlors at the same time. The complete program will be sent to you very soon. It will help the committee very materially if you make an advance registration. There is a slight change in the fee this year which we think you will appreciate. If you wish to attend the scientific sessions only, the fee is $6.00. If you (or your wife) wish to attend the banquet only, the fee is $6.00 per. The menu includes fruit, steak, and the actual cost to the organization is $6.04, so you see we are not making any money on the food. Most of you will want to attend both the scientific sessions and the banquet, and that will cost you $10.00. Cocktails—complimentary—at five o'clock, dinner is at six.

We have commitment for 21 exhibits. There is room for a few more. When that drug salesman comes in to see you, tell him about this meeting, if perhaps he hasn't signed up. If you get a lead, call me. There will be several small group luncheons at noon, with the speakers. Those who buy tickets first and early will be able to attend. More about this later. Internes and residents will not be charged if they attend the scientific sessions. If they want luncheon or dinner, they pay. Surgery in all hospitals of the district—except for emergencies—will be closed. Check with your hospital. Look forward to a successful meeting.

C. A. Gustafson, M.D.

FROM THE BULLETIN

Twenty Years Ago—August, 1938

The biggest news in medical circles that month was the completion of the new East Wing at the South Side Unit of the Youngstown Hospital. Proudly standing four stories high in buff brick it marked the first departure from the low gray stone buildings of the old "City Hospital." The new emergency rooms were on ground floor in the back; X-ray and plaster room on the first floor and the children's ward with a large sun parlor on the fourth floor.

It still stands as an integral part of the new South Unit, no longer housing the emergency rooms which have been moved to the front of the hospital; its X-ray quarters long since outgrown and its four or six bed wards now the "slum area" compared to the new south and west wings.

But we were very proud of it then and the Bulletin was filled with praise for Dr. "Pop" Morrison and Mr. John Tod who worked so hard and gave so much to get it built. If you look you can still see the bronze plaque which reads: "This building was made possible by the generous gifts of Youngstown industries, merchants and friends of the hospital through the efforts of Dr. R. M. Morrison."

The Bulletin spoke in favor of a bond issue then being considered for widening streets and building new bridges. The writer spoke of the difficulty of getting from the South Unit to St. Elizabeth's Hospital through the bottle-neck at Spring Common, or winding through the maze of narrow, crooked streets getting from Himrod Ave. to South Ave. In the days before the great Depression a driver going out Market St. or Mahoning Ave. would find himself in a queue of cars behind a trolley, not daring to pass to the left because of the law and not able to pass on the right because of parked cars.

There was considerable stir and much forboding because of an article in Fortune magazine which said that Youngstown was through as a steel center.

Ten Years Ago—August, 1948

New internes were arriving and President Noll reminded the members "the practicing physician has a great responsibility to give some of his time, energy and experience in fulfilling the expected curriculum, whether he be on the courtesy staff, emeritus staff or active attending staff. This is an important time to teach the art of practicing medicine. Know your interne staff and demonstrate interesting cases to them as the occasion arises. It is an important way to advance the standards and knowledge of the entire profession."

General Paul R. Hawley, then Director of the Blue Cross and Blue Shield National Organizations predicted the end of free medicine in this country in three years unless the doctors did something about it. They did.

An article by J. H. Talbott quoted by J. D. Miller stated that local reactions from penicillin were unimportant except following intrathecal injections which sometimes caused headache, vomiting, convulsions or unconsciousness. Nowadays so many people are sensitive to penicillin that no injection of it is given without first inquiring about previous reactions. The article warned of sensitization following topical applications.

The city of Youngstown imposed a new income tax of .003% of the net income. Now the tax is .009%.

Editor Gustafson wrote that medicine had become over-organized. Surgical societies, obstetrical societies, pediatric societies and general practice societies were lowering attendance at Medical Society meetings and were reducing the interest in its activities. He stressed the importance of the County Medical Society as a common meeting ground for all groups where they could best fulfill their responsibility to the public, to the medical profession and to medical organization. His advice is just as cogent today as it was then. Parenthetically we note that the men most active in their special groups are also active in the affairs of the Medical Society.

J.L.F.

YOUNGSTOWN AREA HEART ASSOCIATION, INC.

The Youngstown Area Heart Association has mailed to physicians a sample "emergency" identification card for patients on long-term anticoagulant therapy.

The card, designed as a wallet insert, seeks to protect the patient on anticoagulants in case of accident, dental surgery or other treatment that may induce bleeding. It points out that the bearer "is being treated with anticoagulants which slow down clotting of the blood." In case of emergency—bleeding, injury or illness—the card advises that a doctor be called, since the patient may require an antidote.

The card contains space for the name, address and phone number of the individual's physician. There is also space to indicate the kind of anticoagulant prescribed and the patient's blood type.

In addition to making the anticoagulant identification card available to physicians, the Heart Association also is calling it to the attention of hospital emergency room personnel, nurses, police and others who most commonly handle emergencies.

Physicians may obtain the cards by calling the Heart Association office, Riverside 4-8919.

FRANKING PRIVILEGE DISCONTINUED

Dr. L. A. Blum has advised the Medical Society of a letter received from the Ohio State Department of Health stating that the United States Public Health Service has discontinued the use of the franking privilege for the mailing of birth certificates, death certificates, and morbidity reports to the Ohio Department of Health.

The Ohio Department of Health will provide envelopes to provide free mailing of birth and death certificates to the Division of Vital Statistics. However, local health departments are asked to assume the cost of mailing morbidity reports and venereal disease epidemiologic reports. Also, it will be necessary for physicians, hospitals, and clinics to pay postage for the reporting of notifiable diseases.

A COMPLICATION OF ANESTHESIA

The production of adrenocortical hormones is increased in response to many forms of "stress." Agents which evoke this non-specific reaction are those which disturb homeostasis and therefore include anesthesia and surgical trauma. The primary biological purpose of the endocrine disturbance induced by these stimuli is to raise the body's resistance and for this the adrenacortical hormones appear to be necessary.

Changes following anesthesia and surgery such as negative nitrogen balance, Na and H_2O retention and increased K excretion bear a resemblance to those caused by overactivity of the adrenal cortex. The eosinopenia following operation is additional evidence of adrenal cortical effects. Add to this an increase in plasma and urine concentrations of corticoid products following surgery and the accumulation of indirect evidence is impressive.

At times each and every anesthetic agent has been both incriminated and absolved of causing an increase in corticosteriod values. However reliable evidence is scanty, but the general concensus is that an increase of adrenocortical activity occurs but this is much lower than values found after surgical trauma. But remembering that a patient may need only a slight stress to expose a critical deficiency dispels any sense of security the foregoing information may lend to an anesthesiologist.

The problem becomes a "pentagon of puzzlement" if we add the roles of the adrenal medulla, pituitary and thyroid.

We take the liberty of creating classifications of patients into the types prone to show adrenal deficiency and to the times this may occur.

Type I. The patient who has been on prolonged corticoid therapy. The most frequent is the rheumatoid arthritic who requires large doses over an extended period of time. Another is the patient suffering from some chronic skin ailment who has been treated enthusiastically with adrenal salves.

We have the advantage of being forewarned of these individuals that they exist primarily on iatrogenic adrenals and may, if not primed before, during, and after surgery, exhibit sudden hypotension that responds poorly to the usual supportive therapy. Type II. The second type of patient is the chronically ill, those who have a disease that has served as a stress over a period of months. These patients exhibit the infamous high hemoglobin of hypovolemia. They appear safe for surgical procedures but at the beginning of anesthesia and surgery become hypotensive and the operation and anesthesia must be immediately suspended. There is little forewarning in these patients.

The third type of patient is the healthy individual who has had severe surgical trauma.

Now as to the time of occurrence of hypotension it cannot be more specific than early and late. By early we mean at the onset of anesthesia before surgery has commenced. It has been experienced to have a patient exhibit extreme hypotension after induction and not respond until he has been lightened. At the other extreme a patient may withstand anesthesia and surgery over an extended period and appear upon leaving the O.R. in excellent condition. Suddenly in the Recovery Room the patient exhibits hypotension unrelated to blood loss or any apparent immediate surgical complication. This patient may be resistant to all supportive therapy except the combined intravenous administration of cortisone and levophed.

There is no set pattern of preparing a patient who has been on cortisone therapy or who might be in great adrenal deficiency. The following is a very elastic suggestion:

100 mgm. cortisone i.m. or oral at hs.
50 mgm. with premedication narcotic
100 mgm. solu-cortef i.v. drip and as needed immediate post-op
25 mgm. cortisone q.i.d. x 2 days
25 mgm. cortisone b.i.d. x 3 days
25 mgm. cortisone q.d. x 4 days

There are two paths available with such therapy. Returning to the previous daily dose if that is the desire of the patient's physician or weaning the patient completely away from cortisone therapy. This is the ultimate responsibility of the surgeon or medical attendant.

Upon the foregoing rests, too, the responsibility of beginning and sustaining the administration of ACTH. Here the purpose is to prime the patient's adrenals to take over their own secretion. The speed with which this can be accomplished depends upon the length of time the adrenals have been getting outside help.

The administration of ACTH can be started with the first post-op dose of cortisone or at any time from that point. The conventional dose of 40 units or any part of that dosage may be used. This is a most non-specific regime.

What drugs are available? You might well ask how many shades of green are there. We use cortisone, solu-cortef, and ACTH.

What is the difference in action? It depends upon whose advertising you read. If you mentally assign all the undesirable side effects to their maximum and the desirable to their minimum and restrict yourself to one drug you might have the beginnings of a working knowledge.

Elaborate the actions of group
Some save Na and H_2O and eliminate K
Some are proteolytic
Some are gluconeogenic
What action affects anesthesia?
Edema makes it difficult to find a vein
Low K is bad for cardiac conduction
And for some reason they shock

The primary purpose of the paper is to acquaint you with the problem of anesthesia and cortisone. We ask your help in acquainting us with the knowledge of previous corticoid therapy either by direct communication or by telling your patient that he is on such cortisone therapy. Without this knowledge unfortunate complication may occur.

This is then the presentation of a complication of anesthesia, surgery, and medicine with emphasis on not so much what we do as long as we do it together.

J. R. Phillips, M.D.
Resident in Anesthesiology
Youngstown Hospital Association

MEDICAL GLEANINGS

THE CURRENT STATUS OF THE PREGNANT CARDIAC

Jack M. Kaufman and Paul E. Ruble
Annals of Internal Medicine
June, 1958

CONCLUSIONS

1. Most hemodynamic changes of pregnancy become significant early in the second trimester.

2. The hemodynamic changes of pregnancy may greatly modify heart murmers and other physical findings.

3. A patient with either rheumatic or congenital heart disease should be evaluated both medically and surgically early in pregnancy. When cardiac symptoms appear early and surgical improvement of the heart is possible, surgery is preferable to abortion.

4. Ninety-six patients with mitral commissurotomy subsequently became pregnant, with only one maternal and fetal mortality.

5. Ninety-three mitral commissurotomies were performed during pregnancy, with three early cases of maternal mortality, probably avoidable with present anesthesia and surgery. Eighty-eight live babies were delivered in this group.

6. Twenty-two patients with patent ductus were sectioned during pregnancy, with no maternal mortality and only one miscarriage one month following surgery.

7. Patients with various other types of congenital heart disease, such as coarctation of the aorta, tetralogy of Fallot, and interatrial and interventricular septal defects, may go through pregnancy safely.

8. Though ideally done before pregnancy, heart surgery is often a safe procedure during pregnancy for mother and baby.

9. Heart surgery is an adjunct to good medical management, and the patient should have the advantage of careful medical management through pregnancy, delivery and the important postpartum period.

CARCINOMA OF THE PANCREAS: A CLINICAL STUDY BASED ON 84 CASES

David Birnbaum and Julius Kleeberg
Annals of Internal Medicine
June, 1958

The clinical and laboratory data of 84 cases of carcinoma of the pancreas collected from three hospitals in Israel were analyzed. The significant findings included the observation that this disease occurred mainly in Jews originating from European countries, and rarely in those from Oriental countries.

Anorexia and loss of weight were the most frequent symptoms. The classic diagnostic syndrome of painless jaundice was rarely observed. Psychic symptoms occurred in 10 patients. Only about 50% of the patients with jaundice had a distended gall bladder.

Increased sedimentation rate was a very frequent finding. Hyperglycemia and positive glucose tolerance tests were observed in almost half of the patients, and were not correlated with the size of the lesion in the pancreas. External pancreatic insufficiency developing in the course of disease and proved by stool examination was found in 38% of the cases examined. Serum amylase determinations were found to be of limited value.

Radiologic examination pointed to the correct diagnosis in 25% of the cases.

The extremely high incidence of thrombo-embolic phenomena, especially in carcinoma of the body and tail of the pancreas, is stressed as an important sign, and the role of trypsin in the thrombo-embolic process is discussed.

ACUTE PANCREATITIS: A CLINICAL REVIEW OF 72 ATTACKS OCCURRING IN 54 PATIENTS

Paul L. Shallenberger and David F. Kapp
Annals of Internal Medicine
June, 1958

When the diagnosis has been made with reasonable certainty, medical management is to be preferred. Surgery should be reserved for complications or the correction of associated biliary tract disease and, if the patient's condition permits, should be delayed well into convalescence.

In general, the preferred medical therapy consists of the following procedures: (1) correction of fluid and electrolyte balance and the administration of whole blood, plasma or plasma expanders or albumin to combat shock (particular attention being paid to correction of calcium deficits in addition to the usual electrolytes); (2) relief of pain with Demerol or splanchnic block if necessary; (3) an attempt to antagonize the usual stimulation and ability of the pancreas to secrete, by use of gastric suction, anticholinergics and antacids; (4) administration of broad spectrum antibiotics where indicated.

In addition to the above plan of general treatment, we believe that insulin should be given to control hyperglycemia when present. In our own series, the early administration of insulin seemed to exert a protective effect on the severity of subsequent diabetes.

R. L. Jenkins, M.D.

SOCIAL NEWS

St. Elizabeth Hospital

Dr. John Stotler has a new address on Fifth Ave. to which their new daughter born on July 14th will come home. It's Mrs. S's fifth Caesarian. Dr. Phillips has a new address, too, now that they've moved into their new home on Virginia Trail.

Dr. Jim Birch is home and working, but Drs. Golden and I. C. Smith are still recuperating.

Dr. and Mrs. L. G. Coe returned from Wheaton, Ill., where they visited their daughter.

Dr. Pat Cestone took what I consider the ideal vacation. He and his wife spent three weeks touring the west, stopping at any attraction that aroused their interest. His wife is quite the authority on western lore, and knew just where to go. Pat also attended the San Francisco meeting, but didn't see Drs. Neidus and Poling, who, I understand, also were there at the meeting.

Dr. Gambrel took his entire family on a three week trip to Florida, and, since they were driving, they, too, stopped along the way wherever they wished.

The entire staff extends a welcome to our new Associate Pathologist, Dr. Joseph Tandatnick.

In case you didn't know it, the Youngstown Horse Show that Dr. Benko has such a large part in, is the fifth largest charity horse show in the country.

J. R. Sofranec, M.D.

THE TRANQUILIZERS—THEIR IMPORTANCE AS REGARDS ANESTHESIA

GENERAL REMARKS

These drugs go by several names, tranquilizers, ataraxic agents, phrenotropic agents. The word "ataraxia" comes from a Greek word meaning "peace of mind." It was coined by Fabing in 1955.

It is interesting that these drugs could have been classified by other names that signify their other effects as anti-emitics, antihistaminics, antispasmodics and so on.

A very important thing to remember is that these drugs have no one action and because of this fact they should be used with great care. Some of the side effects are undesirable.

There are now at least 22 different drugs of this type on the market excluding those in combination with other agents. It has been estimated that 140 million dollars were spent on these drugs in 1956.

DRUG TYPES

An example from each group of drugs will be discussed briefly and later summarized as to physiological effects.

I. Rauwolfia Alkaloids (Serpasil, Moderil, and Harmonyl)

These drugs are derived from the roots of many species of Rauwolfia which are found in India and other tropical countries. They were used for many centuries in India as cure-alls.

Their action seems to be mainly on the hypothalmus. It is thought by some that there is a release of serotonin from the brain cells. It is also thought that they impinge upon the Reticular Activating system. Animals which have been given Serpasil resemble those with posterior hypothalmic lesions. An alertness pattern is seen on EEG. These drugs facilitate the convulsant properties of the cortical stimulants and antagonize the effects of Dilantin.

The sympatholytic activity of these drugs is seen in the following symptoms: miosis, bradycardia, decrease in BP, hypothermia, ptosis of eyelids, increased peristalsis, increased action of parasympathetic system. Depression of vasoconstrictor responses centrally.

II. Phenothiazaine Drugs (Thorzaine*, Sparine, Compazine*, Pacatal, Trilifon*, Dartal*, Phenergan) * contain Chloride atom.

The parent drug, phenothiazine, was first synthesized in 1888. It was used at that time as a vermafuge, uriary antiseptic, insecticide. It is the basic nucleus for methelene blue and gentian violet.

Chlorpromazine epitomizes this group and will be used as an example even though some of these other agents are more potent.

The primary effects are inhibition of epinepherine and acetylcholine, potentiation of the action of opiates and barbituarates, hypothermia especially in combination with demerol and phenergan. They have an effect on the hypothalmus and Reticular Activating system but the exact site of action is not known.

The chief common side effects are drowsiness, hypotension, constipation, pyrosis, impaired visual acuity, dermatitis, Parkinson-like syndrome, confusion, jaundice, agranulocytosis.

III. The Diphenylmethanes (Atarax, Frenquel, Suavatil)

This group of drugs is less potent than the preceding group but of similar activity. There are several congeners of this group, several of which are, meratran, an isomer of frenquel; ritalin, trasentine, and bonamine.

As stated before these drugs have much the same action as the former group but to a lesser degree. They have tranquilizing effects, they counteract the effects of serotonin and acetylcholine and some have an atropine-like action.

IV. The Meprobamates or Propanediol group (Miltown, Equinil Dioxolane)

This group is chemically related to Toserol (Mephenesin). Two related drugs which have similar action but are different chemically are Ultran, and Nostyn.

Their action is primarily one of depression of multineuronal reflexes in the spinal cord and the lower brain centers. They also exert an effect on the thalamic centers, and seem to work by accelerating acetylcholine breakdown at synapses. There is also ataraxia, relaxation of voluntary muscles without loss of conditioned reflexes. There are very few autonomic system effects.

With this very brief and general consideration of the major drugs, I think it can be seen that there are two types of activity namely, those which act on the autonomic system and those that act on areas other than the autonomic system. These have been termed then the autonomic suppressors, which include the rauwolfia compounds, the phenothiazine drugs and the diphenylmethanes; and the central relaxants, which include the meprobamates and similar drugs.

Their actions are summarized in the following tables:

PHYSIOLOGICAL EFFECTS I

Actions	*Suppressants*	*Relaxants*
Adrenolytic action	Present	None
Anticholinergic action	Present	None
Antihistaminic action	Present	None
Strychnine toxicity	Increased	Decreased
Hexobarb. Synergism	Marked	Slight
Conditioned reflexes	Depressed	Unaffected
EEG changes	Generalized	Localized
Convulsive threshold	Unaffected	Increased
Multineuronal reflex	Unaffected	Depressed
Afterdischarges	Unaffected	Decreased
Muscle spasm	Unaffected	Released

PHYSIOLOGICAL EFFECTS II

	Reserpine	*Chlorprom.*	*Meprobamate*
Body temp.	Fall	Fall	No change
BMR	Fall	Fall	No change
Barb. Poten.	Yes	Yes	None
Antiemetic	None	Yes	None
BP	Fall	Occ. collapse	No change
Pulse rate	Bradycard.	Tachycard.	No change
Intest. Motil.	Decrease	No change	No change
Induct. sleep	Yes	Yes	Moderate
Muscle relax.	None	None	Yes

GENERAL MODE OF ACTION AND SITE OF ACTION OF THESE DRUGS

The inversion of stress responses by these drugs, namely the so-called suppressants is based mainly on the depression or suppression of spinal cord reflexes caused by slowing or abolishing neuronal discharges which stimulate the reticular activating system. In this manner a multitude of stimuli of sensory and autonomic nerves converging from the periphery are cancelled.

Suppression extends up to the subcortical connections of the Reticular Activating System and is seen on EEG as a slowing of the asynchronus pattern. Other effects of these drugs seen are drowsiness, lessened response to visual and auditory stimuli, decreased muscular tone and regular breathing.

The proponents of the use of these drugs in surgery and anesthesia say the basis of value lies in the fact that they exert an atropine-like action as well as simulating the action of procaine, Quinidine, the antihistamines and the inversion of the action of acetylcholine and epinepherine.

As pointed out earlier, the action of the central relaxants is different. The exact mechanism is not clearly defined. They show a selective action on internuncial circuits, and a lowering of exaggerated reflexes to normal levels supposedly in the posterior hypothalmic region. In some manner, they also impinge upon the Reticular Activating system.

The Reticular Activating system can be defined as a central midline *CORE* of nervous tissue lying in the spinal cord and extending up to the midbrain. It subserves both sides of the temporal lobe and extends the anterior brain to influence consciousness, wakefulness, memory and emotion. It is a massive switchboard which lies between the environment, both internal and external, and the individual's interpretation of his environment.

The RAS is incompletely understood and has many as yet unnamed functions. However, a few depressants and stimulants of the RAS are known. The depressants are general anesthetics, hypoglycemia, hypoxia, thorazine and similar drugs. The stimulants are adrenergic drugs, hyperglycemia, hypercapnia, actylcholine, and probably serotonin.

EFFECTS IN ANESTHESIA—Especially the suppressants

The chief effect seen under anesthesia with these drugs is hypotension. This is a hypotension that does not respond readily to the commonly used vasopressors. Even epinepherine reversal has been seen in the presence of Thorazine. Hypotension is seen from the use of these drugs alone. In the semi-Fowler or sitting position, greater than normal changes in blood pressure are seen. This is thought to be due to decreased peripheral resistance from these drugs. Greater than usual blood pressure changes are seen in the presence of severe hemorrhage. Under spinal anesthesia the recorded BP drops are greater than those seen from the height of spinal anesthesia alone.

Increased depression of the patient is seen when premedication is given without regard to the presence of these agents.

Tachycardia frequently is present. This brings with it the hazards of decreased coronary flow which in some patients may be crucial. Thorazine has little effect on coronary blood flow as a direct effect.

There is a decreased amount of anesthetic agents needed especially pentothal. These drugs also potentiate the effects of the muscular relaxants.

There is a decrease in reflex activities which have both favorable and unfavorable consequences.

Two other effects seen are slow emergence from anesthesia and occasionally pre-operative mental confusion of the patient.

EVALUATION AND CARE OF THE PATIENT

The presence of these drugs is frequently noted on pre-op rounds either from the chart or by history from the patient. Oft times the patient is not able to tell what drug he has been on but merely states that he is taking a tranquilizer or some "new nerve medicine." When a question about these drugs arises, the attending physician should be called for further information. It would be ideal if this information and information about the drugs a patient is taking or has taken recently were to be sent in with the patient.

Orders for these drugs are usually cut pre-op. In the case of the rauwolfia drugs this is not satisfactory because they are slowly eliminated. At Henry Ford Hospital in Detroit patients on hypertensive agents and tranquilizers are admitted 10 to 14 days pre-op and the drugs removed. The other drugs of the suppressant group are probably eliminated from the body more rapidly than are the rauwolfia alkaloids. It is known that a single intravenous dose of a phenothiazine drug is eliminated from the body within about six hours.

The addition of atropine in a dose above and beyond the usual dose for a given patient will sometimes aid in preventing hypotension, especially in the presence of Serpasil.

Pre-op medication should be reduced in the presence of these drugs—especially the barbiturates.

Hypotension, during surgery as stated previously is the chief ill effect. This in itself is not frightening but it becomes so when the usual vasopressors fail to give the desired response. It has been reported that norepinepherine (Levophed) is of value here, but this is not seen in our experience.

During the conduct of anesthesia one must be over-cautious of every minimal change in the patient's status when there is a possibility he has been on the tranquilizers.

While it is felt by many men that the so-called central relaxants cause no trouble, it has been seen in our experience that they can and do cause BP changes and potentiate barbiturates. Also in this connection, the dosage of the medication is important on an individual basis. No *ONE* dose fits all the patients.

In closing, it is important to remember that these drugs are extremely potent. They should be prescribed for very definite indications. The latter becomes important in the presence of the fact that the tranquilizing drugs have not *ONE* predictable action, and have many undesirable and even harmful side effects.

J. R. Essig, M.D.
Resident in Anesthesiology
Youngstown Hospital Association

MEET THE OLD PROS

B. J. DREILING

Doctor B. J. Dreiling was born in Victoria, Kansas, 1897. He has practiced general medicine and surgery in Youngstown since July, 1922. His present office is located at 1637 Mahoning Avenue, where he has been for 15 years. He is a graduate of St. Louis University undergraduate and medical school, finishing in 1920.

His interneship was served at St. Elizabeth from 1920 to 1922. He was the first interne at St. Elizabeth's from St. Louis University.

His first office was located on East Federal Street where he practiced several years, then moved his office to the Central Tower where he stayed 10 years associated with Doctor Brady, a cardiologist, just until his death. He then located on Mahoning Avenue and is the oldest practitioner on the west side in years of practice there.

Doctor Dreiling had four brothers and three sisters. One brother is a Dentist practicing in Youngstown.

He has two sons, one in Youngstown and the other in Hollywood, Florida, attending Miami University Law School.

Seven years ago the Doctor purchased a 110 acre farm as a business venture where he raises beef cattle and his own feed and spends most of his spare time working there.

He is a member of the American Academy of General Practice, Elks Club and K. of C.

His hobbies are fishing and golf, but he has not played much golf recently.

Doctor Dreiling is an energetic, hard working individual. He has an unassuming, pleasant personality. Like many mid-Westerners, he is straight forward, honest and what I would call a "solid" citizen.

L. O. Gregg, M.D.

SPECIAL COUNCIL MEETING

Monday, July 21, 1958

A special meeting of the Council of the Mahoning County Medical Society was held on Monday, July 21, at the offices of Dr. M. W. Neidus, 318 Fifth Ave., Youngstown, Ohio.

Meeting was called to order at 9:00 P.M.

The following doctors were present: A. A. Detesco, President, presiding, G. E. DeCicco, F. G. Schlecht, P. J. Mahar, C. C. Wales, Asher Randell and M. W. Neidus, comprising the Council. Dr. F. Schellhase was a guest.

Dr. Schellhase reported the activities of his committee in the planning for Civil Defense for hospitals and physicians. A motion was made, seconded and duly passed to accept Dr. Schellhase's report.

Dr. Detesco reported for Dr. J. L. Fisher, Chairman of a special committee appointed to recommend a full-time Executive Secretary for the Society.

A motion was made, seconded and duly passed to accept the committee's recommendation to hire Mr. Howard Rempes, Jr.

Move seconded and passed to pay routine bills for July and August. Adjourned at 10:00 P.M.

G. E. DeCicco, M.D.
Acting Secretary

ST. ELIZABETH HOSPITAL NEWS

Since our last report there has been instituted a new adjunct to the medical education program. Visiting professors from the University of Pittsburgh and Western Reserve University have begun a series of twice monthly Thursday afternoon conferences. The initial program featured Dr. Frank Mateer, Assistant Professor of Medicine, University of Pittsburgh, who conducted a conference on Nephrosis and the Nephrotic Syndrome, and Acute Renal Failure. The next conference was June 19th and Dr. George Gubuzda, Associate Professor of Medicine, Western Reserve University spoke on Liver Coma and the Fatty Liver Syndrome.

Dr. David Ginder, Director of Medical Education, was recently awarded a United States Public Health Service grant to continue his research on Myxoma and Fibroma Virus infections.

Dr. Angelo Riberi, resident in surgery presented a paper to the Cleveland Surgical Society, University Club, Cleveland, Ohio in April on "Unusual Complications of Hiatus Hernia." This presentation was given the "Hospital Prize" which was a $50.00 award for one of the seven best papers in a group of thirty presentations.

Within the last month, the Pathology Department has added to its staff, Dr. Joseph Tandatnick, who will be Associate Director of Pathology and Blood Bank.

Another innovation is the appointment of Mrs. Paul Hurwitz as Play Therapist.

L. P. Caccamo, M.D.

MEDICOLEGAL PROBLEMS OF SENILITY

(Continued from July Bulletin)

The medicolegal implications are many and varied; they will undoubtedly increase in the future. The mentally ill or imbecilic persons are not considered in this discussion. We are concerned here only with those legal acts in which the courts emphasize age in arriving at their decisions. Let us briefly take up some of the more common legal problems.

To begin with, let us consider testamentary capacity. To make a valid will a testator must: (1) have sufficient capacity to comprehend the nature of the act he is performing; (2) understand the extent of the property of which he is disposing; (3) comprehend the relationship he holds to those who have claims on him; (4) be capable of making a rational selection among them.

Advanced age and enfeebled condition of mind and body are not sufficient to invalidate a will. The highest degree of mental soundness is not required. Lapses of memory or periods of absent-mindedness do not invalidate a will.

Actual disease of the brain, paralysis with aphasia after cerebral apoplexy, and even softening of the brain may not be sufficient to invalidate a will, if the testator possessed a disposing mind. Extreme weakness or approaching death does not incapacitate, provided the person is rational.

Deafness, epilepsy, tuberculosis, nephritis, fever, cancer, chronic alcoholism, chronic disease of old age, disease of the brain, mental pecularities, weakness of mind, delusions, and hallucinations do not incapacitate. Sinking attacks shortly before a will is made do not incapacitate, nor does lethargy, drowsiness, or stupor from illness. If the testator is delirious at times, his will is binding if not made during such a delirious attack. Personal appearance does not give evidence of his mental capacity. Although he is extremely old, occasionally strange and eccentric, and not able to transact many affairs of life, his will may be valid.

A person of unsound mind may have lucid intervals when he is capable; perfect restoration is not required as long as he can demonstrate beyond a reasonable doubt that he understands: the nature and quality of his act; the nature and extent of his property; and the claims of the grantee on his bounty. He may be insane for other purposes, may even have been adjudged insane. Mental disease of the testator's ancestors or relatives does not alone authorize an inference of insanity.

Suicide or attempt at suicide does not raise a presumption of insanity at the time of execution of the will. He may be a chronic alcoholic. The facts that he was a drug habitue and was using drugs during the period in which the will was made are insufficient to carry the issue to the jury.

Weakness of intellect, whether due to senility, disease, great bodily infirmities, or suffering, may disqualify provided it really disqualifies the person from knowing or appreciating the nature, effects, or consequences of the act.

A person must be of sufficiently sound mind and memory to understand, appreciate, and be mentally equal to the task. If he is so far under the dominion of a person in whose favor he makes the will as to prevent the free exercise of his judgment, such testator is not, in the contemplation of the law, of disposing mind and memory.

When evidence of fraud and duress is insufficient, the charge involved may be one of undue influence only. Fraudulent marriage may be an issue,

or false statements. The issue may be whether the signature was obtained by misrepresenting the contents of the will. Evidence that the widow's brother falsely testified that the nephew had stolen goods was held not sufficient to authorize submission to the jury since no provision was made for the nieces.

A great deal of the mental comfort of aged persons is dependent on the maintenance of their testamentary capacity. To excite sympathy an aged person may tell others that his own family neglects him; at home he refuses to be helped by his relatives. He may go to live with a person outside the family.

The mental and physical state must be considered in relation to undue influence, if the testator is blind, weakened, or uses intoxicants and narcotics. If judgment is impaired, a person is likely to depend on others for even trivial matters. He may be so weak that he must be cared for like a child; his eyesight may be poor, or he may be deaf and someone must be present to take care of his needs. He may be imposed upon by artifice, flattery, threats, and superiority of will. Advice and persuasion are proper; external influence to substitute volition of another for that of the testator is undue influence and invalid.

It is necessary to ascertain, as far as practicable, the power of coercion on the one hand and the liability to its influence on the other. Whenever a person attains an ascendancy that prevents the testator from exercising an unbiased judgment, undue influence exists. Mental impairment or intoxication per se is not sufficient to overcome the presumption of mental capacity, if the will is fair and reasonable or if the note was executed and delivered by the old person. Undue advantage must be proved.

Undue influence may be given as evidence when the will is prepared by the heir or the heir's attorney or when a parent becomes subservient to a grown child. A charge may be made that undue influence was instrumental in procuring the will to be made.

Opportunity and disposition, plus persuasion and importunity, are not sufficient to take the question of undue influence to the jury. Contestants must show control over the testator and substitution of the will of the person exercising the influence.

We will next take up the marriage relationship. Marriage at an advanced age is not of itself evidence of testamentary incapacity. Insanity may be ground for divorce or annulment. It must be proved that the insanity is incurable.

Impotency was described as want of power for copulation, and not merely sterility. The law requires capacity for true copulation and not partial, imperfect, or unnatural copulation. Impotency must be incurable and render complete sexual intercourse practically impossible. Divorce was granted for self-abuse with proof that the incapacity of impotency would be permanent, due to perversion in mind and body.

A woman older than 50 will not be required to have a medical examination for the purpose of giving evidence that she is impotent. A man who marries a woman past 50 will not be granted a divorce for her impotency. A chronic venereal disease at the time of marriage is considered physical incapacity.

However, masturbation in the voluntary presence of the wife was held not to be cruelty, even though her health may be injured by its effect on her feeling. Pederasty is cruel and inhuman treatment within the meaning of the divorce statutes.

Of increasing medicolegal importance is the field of safety in driving. There is a crying need for medical standards for the maintenance of driver fitness, as well as original licensure. Age is important by virtue of its effects on the mind, skilled performance, reaction time, and response to high speed, visual and auditory changes. Among the few small beginnings of legal requirements already enforced are the physical examination, vision, and law tests of drivers between 65 and 70 in the District of Columbia, the vision, law, road sign, and driving tests for Ilinois applicants older than 72 if the license has been lapsed for more than three years, and in New Hampshire, re-examinations for some elderly persons and for some who have become physically handicapped. In the recent session of the Ohio legislature a bill was introduced to require examination for license renewal of applicants who are 70 years of age or more, but it was not enacted into law. In this field, age has a very real medicolegal significance and future legislation will undoubtedly be necessary.

Finally, we must all be concerned with expansion of social security and welfare legislation, public and private retirement and pension funds, hospitalization and medical facilities, housing, day centers, recreational and rehabilitation legislation to meet the human needs of the rapidly increasing problems of senility. *S. Franklin, M.D., LL.B.*

MEET THE NEW INTERNS—YOUNGSTOWN HOSPITAL

DR. GILBERT ALLEN aged 29. Born March 25, 1929 in Knockpatrick, Jamaica, British West Indies. Received his medical education at Howard University where he graduated in June 1958. Dr. Allen is single, likes to play tennis.

WILLIAM G. BARTLETT aged 25. Born May 20, 1933 in Kentucky, moved to Cumberland, Maryland in 1945. Pre-medical and medical education at the University of Maryland, where he graduated in June, 1958. Dr. Bartlett is single, plays the flute and piccolo and played in the university orchestra. He also enjoys tennis, bowling and swimming.

HELMUT HAAS aged 28. Born in Yugoslavia, December 3rd, 1929. Pre-medical and medical education at the University of Minnesota, also two years of medical school in Heidelberg, Germany. Graduated, University of Minnesota, June, 1958. Dr. Haas is married and they have two children: Peter aged 5 and Christine aged 3. His hobby is photography, and he also enjoys chess, ping-pong and tennis.

JOHN S. HARSHEY aged 28. Born February 28, 1930 in Jeannette, Pa. Pre-medical education at Catawba College, Salisbury, N.C. Medical education at the University of Maryland where he graduated in June 1958. Dr. Harshey's wife is a registered nurse, and as yet they have no children. His hobby is model railroading. *R. R. Fisher, M.D.*

COMING MEETINGS

AUGUST

AMERICAN CONGRESS OF PHYSICAL MEDICINE AND REHABILITATION, Philadelphia, Bellevue-Stratford Hotel, Aug. 24-29. Dr. Frances Baker, 1 Tilton Ave., San Mateo, Calif., Secretary.

AMERICAN HOSPITAL ASSOCIATION, Palmer House, Chicago, Aug. 18-21. Dr. Edwin L. Crosby, 18 E. Division St., Chicago 10, Director.

INTERNATIONAL COLLEGE OF SURGEONS, REGIONAL MEETING, WESTERN SECTION, The Riverside Hotel, Reno, Nev., Aug. 21-23. For information address: Dr. Leo D. Nannini, 190 Mill St., Reno, Nev.

NORTHWEST PROCTOLOGIC SOCIETY, Sun Valley, Ida., Aug. 27-29. Dr. John McKay, 645 Medical Dental Bldg., Seattle, Secretary.

ROCKY MOUNTAIN RADIOLOGICAL SOCIETY, Shirley-Savoy Hotel, Denver, Aug. 15-17. Dr. John H. Freed, Denver 20, Secretary.

WEST VIRGINIA STATE MEDICAL ASSOCIATION, The Greenbrier, White Sulphur Springs, Aug. 21-23. Mr. Charles Lively, P.O. Box 1031, Charleston 24, Executive Secretary.

WORLD MEDICAL ASSOCIATION, Copenhagen, Denmark, Aug. 15-20. Dr. Louis H. Bauer, 10 Columbus Circle, New York 19, Secretary-General.

SEPTEMBER

AMERICAN ACADEMY FOR CEREBRAL PALSY, Sheraton-Biltmore Hotel, Providence, R.I., Sept. 25-27. Dr. Raymond R. Rembolt, University Hospitals, Iowa City, Ia., Secretary.

AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS, The Homestead, Hot Springs, Va., Sept. 4-6. Dr. E. Stewart Taylor, 4200 E. 9th Ave., Denver 20, Secretary.

AMERICAN COLLEGE OF PHYSICIANS, Mid-West Regional Meeting, Milwaukee, Wis., Sept. 27. Dr. James F. Gleason, 7 S. Oxford Ave., Atlantic City, N.J., General Chairman.

AMERICAN FRACTURE ASSOCIATION, Skirvin Hotel, Oklahoma City, Okla., Sept. 29-Oct. 4. Dr. H. W. Wellmerling, 610 Griesheim Bldg., Bloomington, Ill., Secretary.

AMERICAN ROENTGEN RAY SOCIETY, Shoreham Hotel, Washington, D.C., Sept. 27-Oct. 3. Dr. C. Allen Good, 200 1st St. S.W., Rochester, Minn., Secretary.

KENTUCKY STATE MEDICAL ASSOCIATION, Brown Hotel, Louisville, Sept. 23-25. Mr. J. P. Sanford, 1169 Eastern Parkway, Louisville 17, Executive Secretary.

MICHIGAN STATE MEDICAL SOCIETY, Sheraton-Cadillac Hotel, Detroit, Sept. 30-Oct. 3. Dr. L. Fernald Foster, 606 Townsend St., P.O. Box 539, Lansing, Mich., Secretary.

MISSISSIPPI VALLEY MEDICAL SOCIETY, Morrison Hotel, Chicago, Sept. 24-26. Dr. Harold Swanberg, 510 Main St., Quincy, Ill., Secretary.

NORTHEASTERN SECTION, AMERICAN UROLOGICAL ASSOCIATION, Equinox House, Manchester, Vt., Sept. 12-13. Dr. F. O. Harbach, 831 James St., Syracuse, N.Y., Secretary.

TRI-STATE MEDICAL SOCIETY, Shreveport, La., Sept. 18. Dr. J. C. Sanders, Sanders Clinic, Kings Highway, Shreveport, La., Secretary.

UNITED STATES SECTION, INTERNATIONAL COLLEGE OF SURGEONS, Atlantic City, N.J., Sept. 7-11. Dr. Karl Meyer, 1835 W. Harrison, Chicago, Secretary.

S. V. Zlotnick, M.D.